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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/052,505 | 02/01/2002 | Sudhendu Rai | D/A1472 (1508/3540) | 8789 |

7590 08/02/2006
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EXAMINER

POON, KING Y

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2625 | |

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/052,505 | Applicant(s) RAI ET AL. | |
| | Examiner King Y. Poon | Art Unit 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 and 28-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-27 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/19/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 4-6, 28-30 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/28/2006.

The traverse is regarding the statement of the examiner that no claims are generic.

The original restriction requirement mailed on 3/17/2006 is directed to claims 2-6 and 26-30 only. Therefore, the non elected claims 4-6 and 28-30 that depend from any allowed claims will be rejoined and also allowed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 7-25, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simirnov (US 6,279,009).

Regarding claims 1, 17: Smirnov teaches a system comprising a server (fig. 5) including a modeling module (model, column 10, lines 1-10, of the model, column 5, lines 20-35) that receives (note) modeling parameters (column 4, lines 16-45) from a remote print shop (remote manufacturing facilities, column 6, lines 24-30, column 9,

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lines 5-25); and executing a modeling program (column 10, lines 1-10) using the modeling parameters to generate model output data (workflow, column 10, lines 10-20).

Note: Simirnov teaches model should be directly, continuously updated with information regarding the real world manufacturing environment, e.g., a resources are taken off or added, column 5, lines 20-35, column 8, lines 20-32. Since the manufacturing environment of the remote print shop/manufacturer is located in the remote print shop/manufacturer, it would have been obvious that the update information are received from the remote print shop/manufacturer.

Regarding claim 7: Simirnov teaches the step of forwarding the model output data to the remote print shop (since the workflow are used to assist the print shop of how a product should be produced, the workflow created are forwarded to the print shop, column 1, lines 18-23).

Regarding claims 8, 18: Simirnov teaches wherein the modeling parameters include print shop organization information (column 10, lines 25-35).

Regarding claims 9, 19: Simirnov teaches wherein the print shop organization information includes information regarding at least one of cell composition (e.g., 120 a) and the equipment (printer) available in each cell (also see column 8, lines 20-25).

Regarding claims 10, 20: Simirnov teaches wherein the print shop organization information includes at least one of equipment and labor resources available at the print shop, the capacity of the equipment resources, failure history of the equipment, repair history of the equipment, and the production costs per unit time used for each resource

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including equipment and labor and material parameters (column 8, lines 20-35, column 10, lines 25-35).

Regarding claims 11, 21: Simirnov teaches wherein the modeling parameters include print job requirements (e.g., binding process 30, 32, fig. 2).

Regarding claims 12, 22: Simirnov teaches wherein the print job requirements include at least one of information regarding the number of individual items in the job (e.g., fig. 2, column 7); the number of pages in each item, job name, job identifier, batch size, number of batches and inter-process buffer size.

Regarding claims 13, 23: Simirnov teaches The method of claim 1 wherein the model output data includes at least one of identification of a bottleneck process (column 9, lines 15-25), turnaround time for the print job, optimal batch size, cost of the print job, and optimal parameters for the control policy such as a scheduling algorithm, job prioritization data and resource allocation information.

Regarding claims 14, 31: Simirnov teaches receiving performance data for equipment in the print shop (column 9, lines 48-50); saving the performance data to a database (column 10, lines 5-10); retrieving the performance data from the database; and analyzing the performance data to determine suggested print shop changes (134, fig. 5, column 10, lines 30-35).

Regarding claims 15, 32: Simirnov teaches forwarding (since the workflow are used to assist the print shop of how a product should be produced, the workflow created are forwarded to the print shop, column 1, lines 18-23) the suggested print shop changes (column 10, lines 30-35) to the print shop.

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Regarding claims 16, 33: Simirnov teaches comprising the step of determining suggested print shop organization revisions (update, column 10, lines 30-35) based upon parameters for a mix of print jobs (fig. 2) and upon the current print shop organization (column 10, lines 25-35).

Regarding claim 24: Simirnov teaches wherein the server further comprises a design module (the software that performs the function of column 10, lines 25-35) adapted to receive print shop organization information and to generate suggested print shop organization revisions.

Regarding claim 25: Simirnov teaches wherein the server further comprises a reorganization module (the software that performs the function of column 10, lines 25-35, column 9, lines 5-25) adapted to receive parameters regarding a change in print job mix at the print shop and to generate suggestions for reorganizing the print shop.

4. Claims 2, 3, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smirnov as applied to claims 1, 17 above, and further in view of well known prior art.

Regarding claims 2, 3, 26, 27: Smirnov does not teach wherein the modeling parameters are received via the Internet (Web based connection).

However, it is well known in the art that a quickest, easy and cheap way of continuously, remotely updating information to a computer system is through the use of Internet (official notice).

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Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smirnov to include: wherein the modeling parameters are received via the Internet.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 11, 2006

A handwritten signature in black ink, appearing to read 'K. Y. Poon', with a stylized flourish at the end.

**KING Y. POON
PRIMARY EXAMINER**